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September 20, 2007

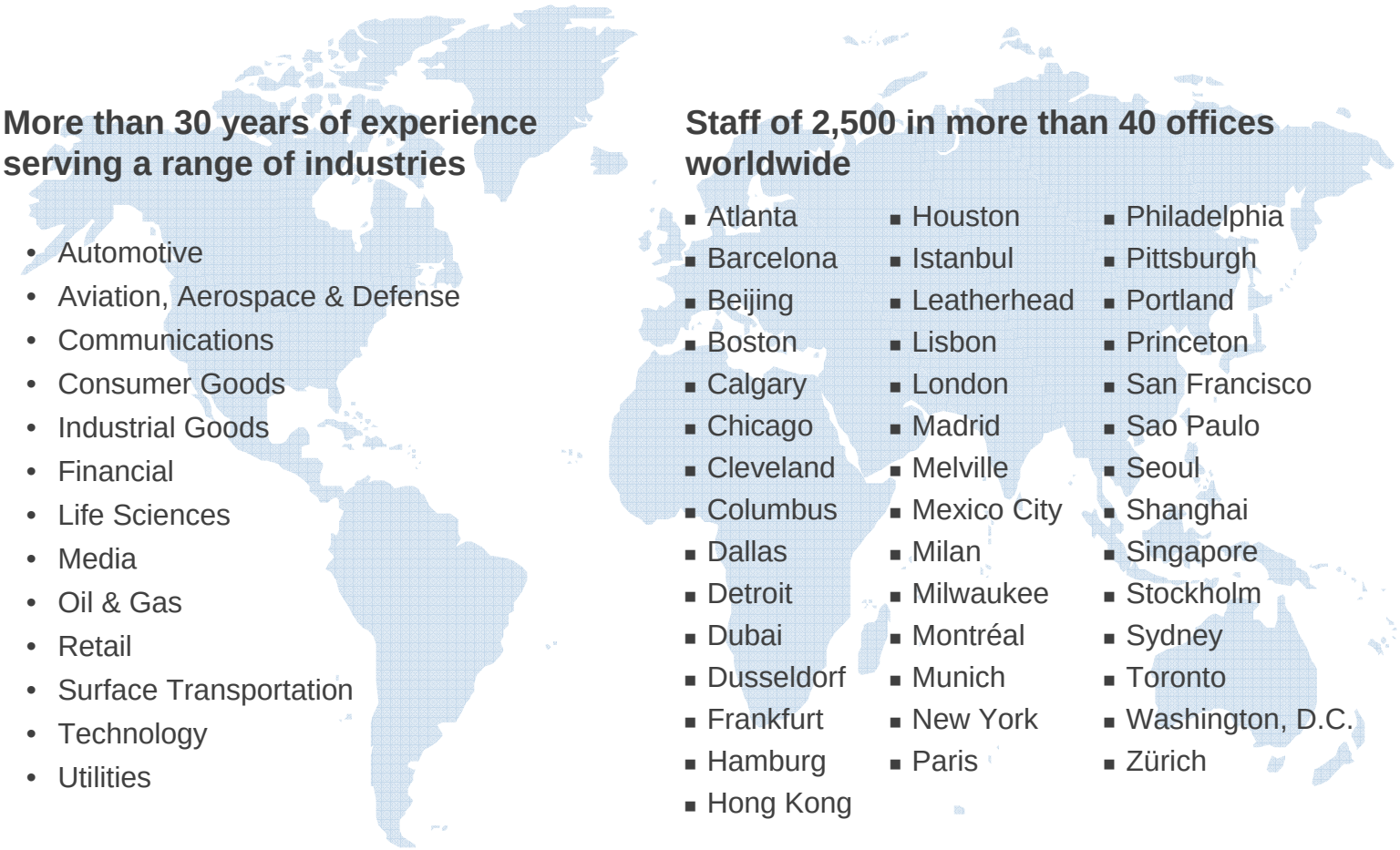
Hearing on Rail Competition and Service

U.S. House of Representatives, Committee on Transportation and Infrastructure

Testimony of William J. Rennicke
Director

Oliver Wyman

Oliver Wyman (formerly Mercer Management Consulting) is a leading international strategy and general management consulting firm with deep industry and functional expertise.



More than 30 years of experience serving a range of industries

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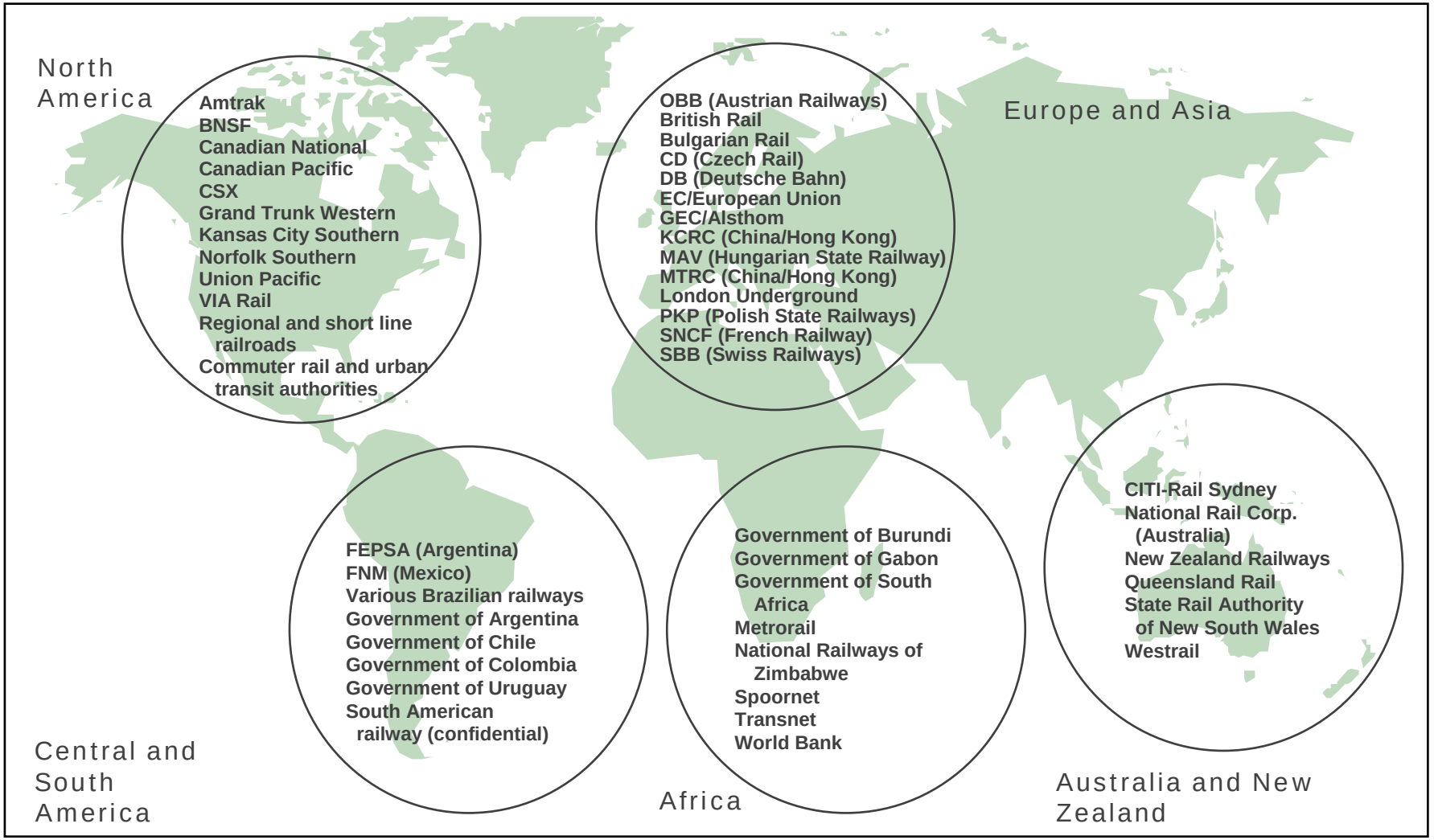
Oliver Wyman's rail practice

Oliver Wyman has carried out major strategic, operational, and financial planning and evaluation assignments for railroads worldwide. The experience and perspectives expressed at this hearing are based on personal domestic and international experience.

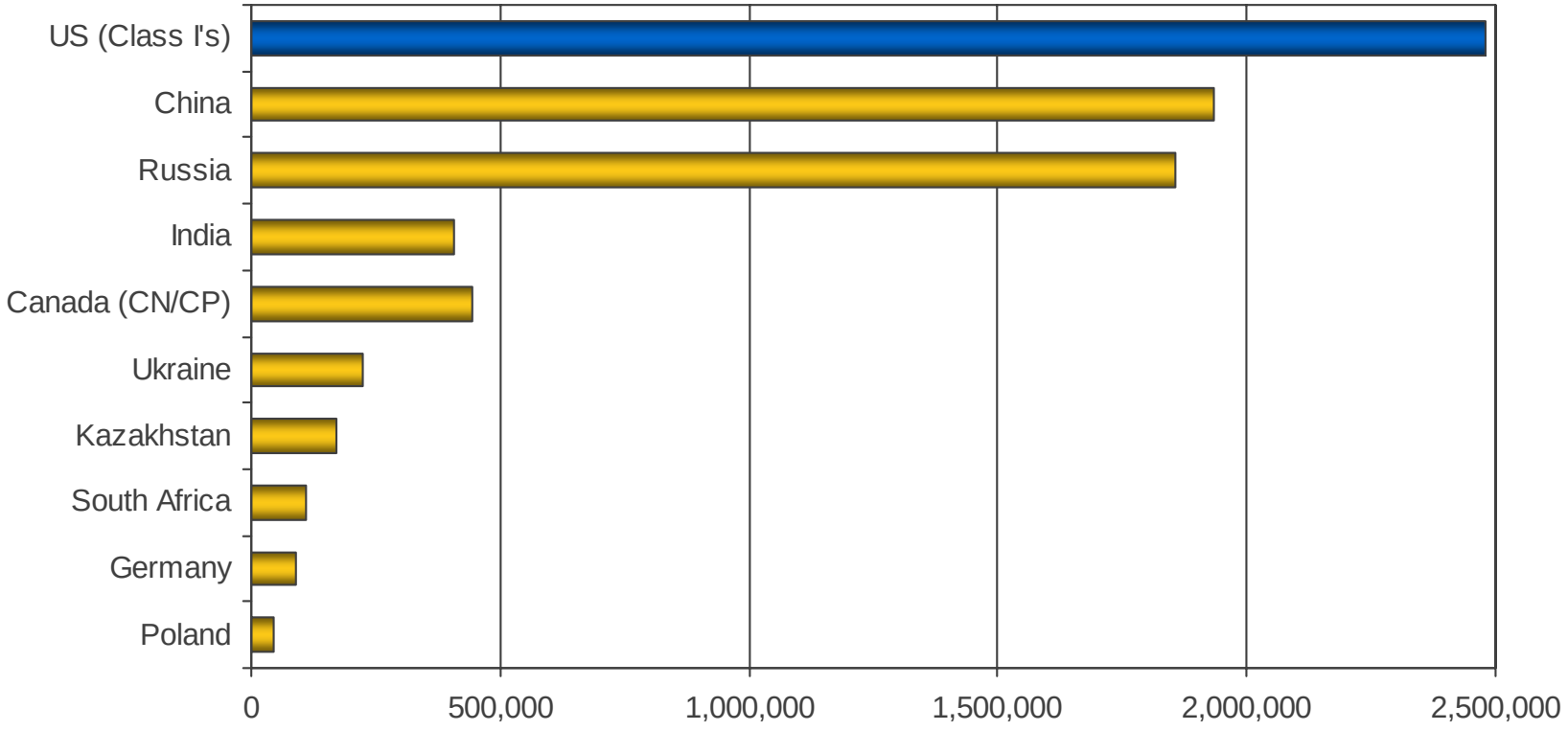


An unparalleled system

The U.S. freight rail system is one of the top-performing rail systems in the world – moving large volumes over long distances…

Top 10 World Rail Systems in Freight Tonne-Kilometers

Millions, available 2005 data



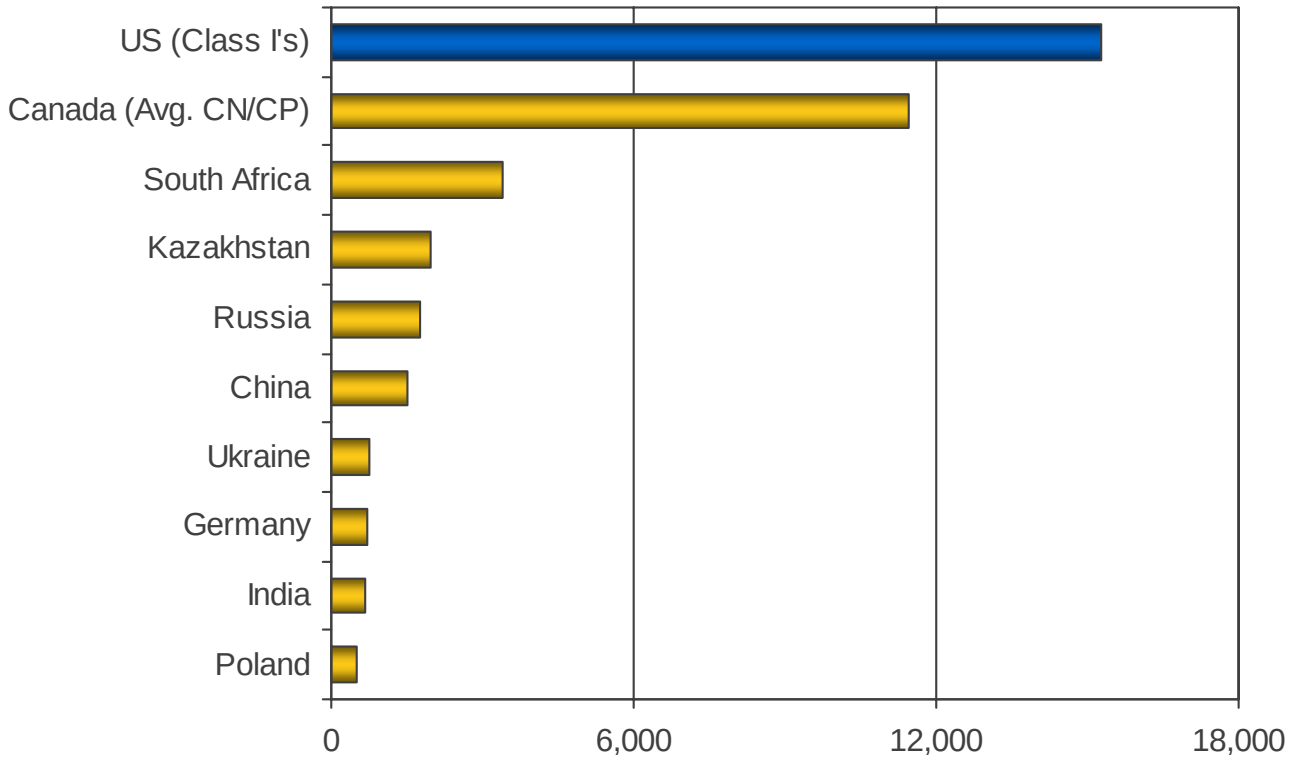
Source: World Bank Railways Database, May 2007.

An unparalleled system

…At a high level of efficiency…

Top 10 World Rail Systems (by tkm): Employee Productivity

Available 2005 data

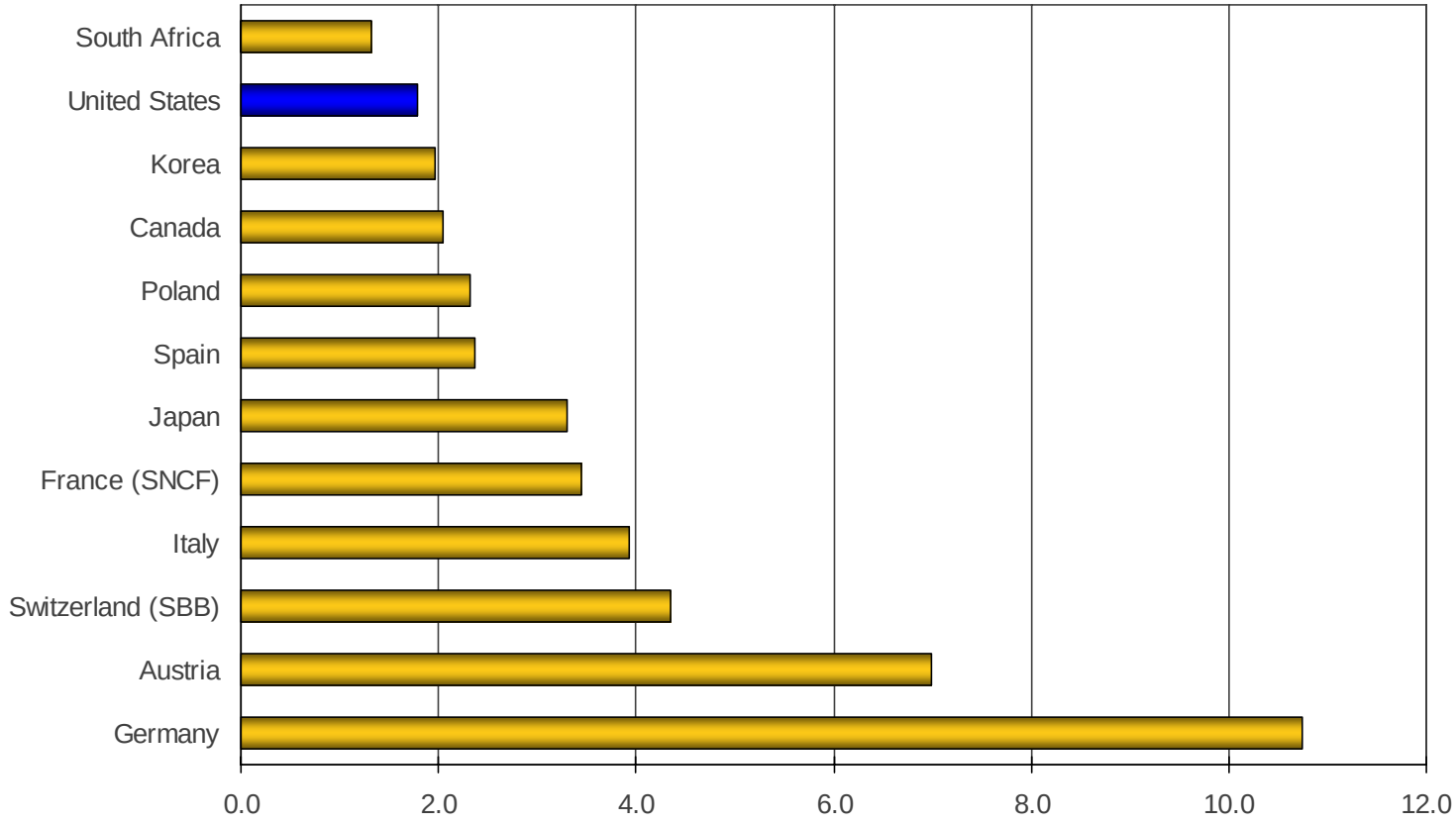


Source: World Bank Railways Database, May 2007. Employee productivity = tkm+pkm per employee.

Low freight rates

… And at some of the lowest freight rates in the world – benefiting both shippers and the economy as a whole.

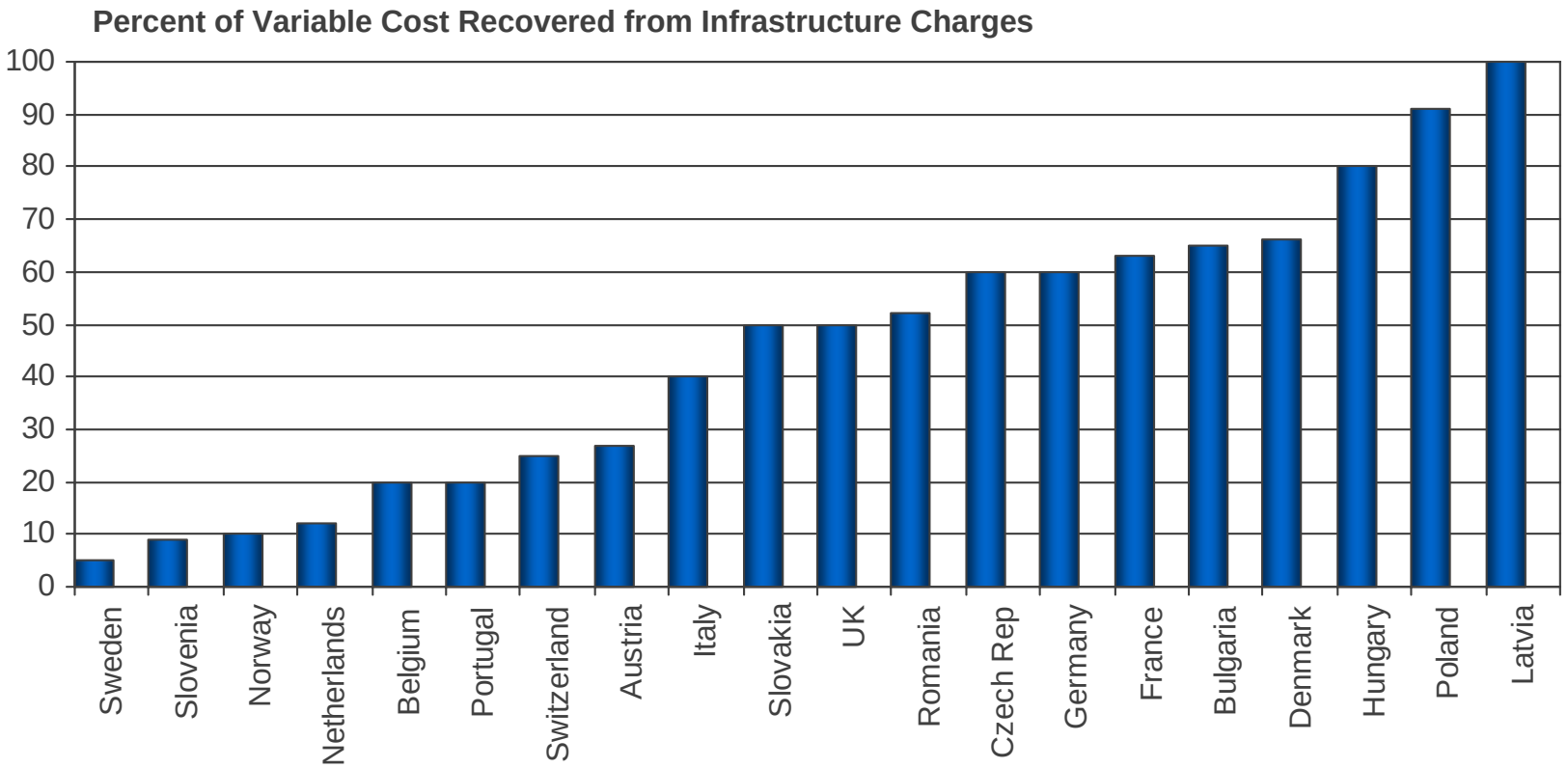
Comparative International Rail Freight Charges
(U.S. cents per tonne-kilometer)



Source: UIC International Railway Statistics 2005, Rail in Canada 2005, Oliver Wyman analysis.

No taxpayer funding

The U.S. freight railroads also require no taxpayer funding, unlike rail systems in most developed countries, which due to regulatory and market forces are unable to cover even their variable infrastructure costs.



Except for the United States, Canada, and to some extent Mexico, no rail system anywhere in world survives without direct or indirect support from the government and taxpayers.

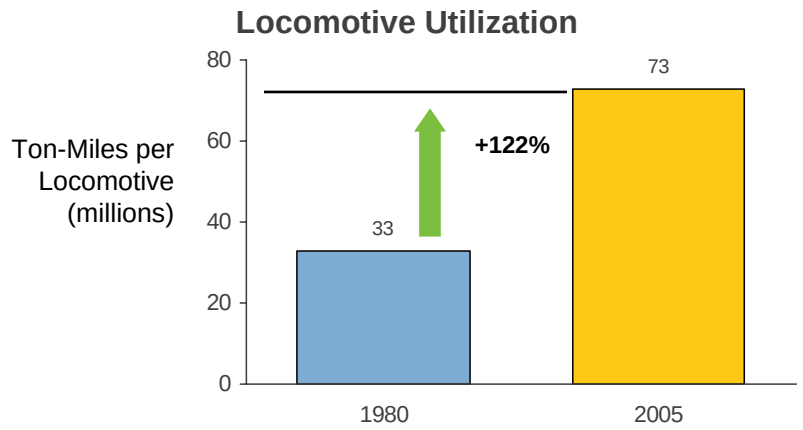
Source: Lou Thompson, Railways Advisor, The World Bank Transport Forum, Washington, DC March 10, 2005.

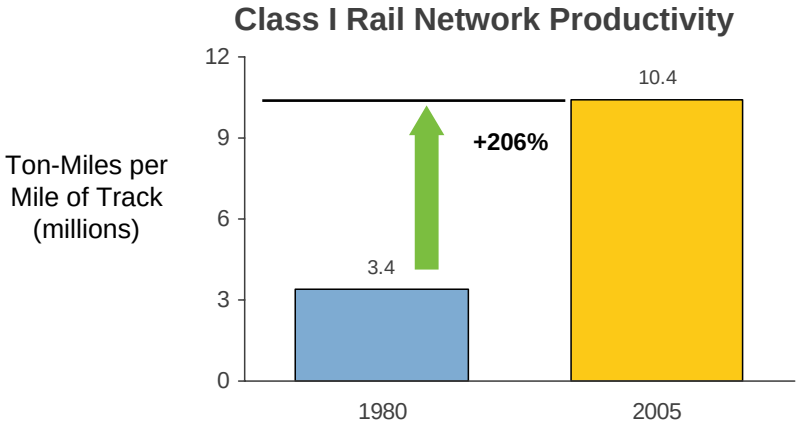
Highly productive

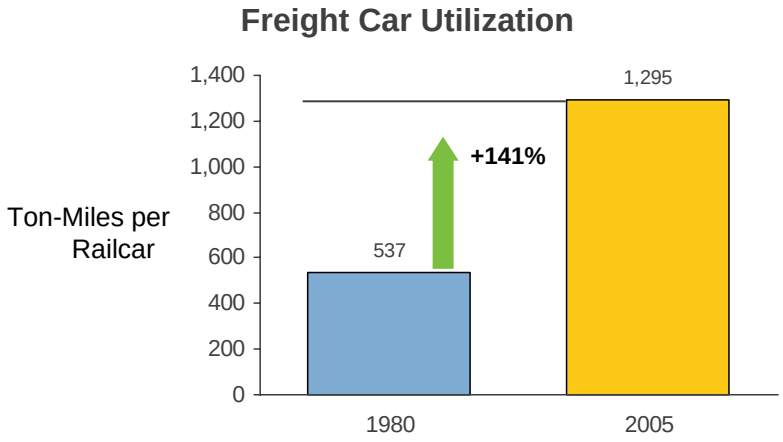
This performance is the result of aggressive efforts to improve productivity…

From 1980 to 2005:

- Railroads reduced their railcar fleets by 23 percent, while increasing railcar productivity by 141 percent.
- Railroads reduced their locomotive fleets by a third, while increasing locomotive productivity by 122 percent.
- Class I railroads reduced their networks by 39 percent, while increasing network productivity by 206 percent.
- **At the same time, rail transport performance increased by almost 85 percent, from 919 billion ton-miles in 1980 to 1,696 billion ton-miles in 2005.**



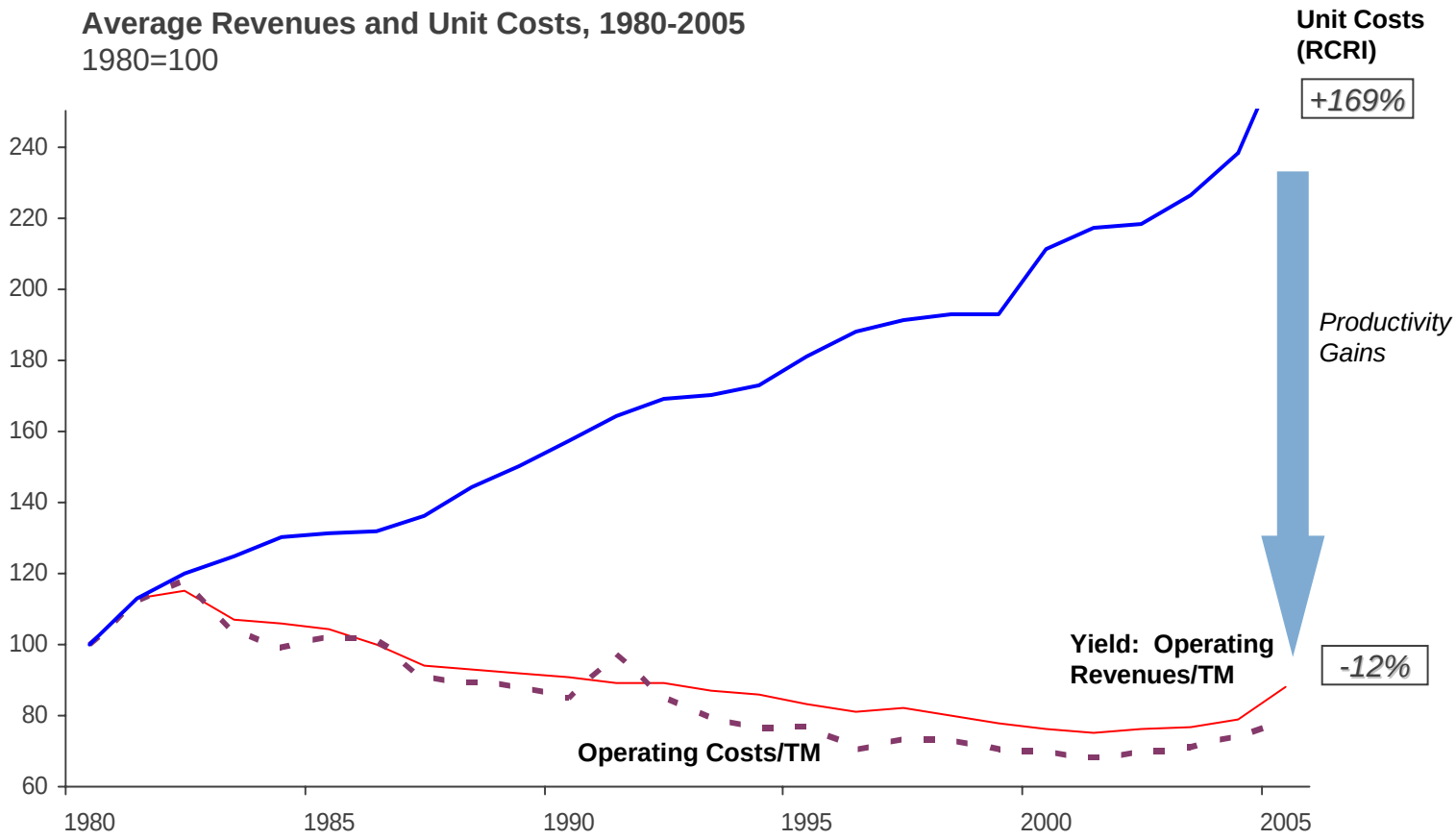




Source: AAR, Oliver Wyman analysis.

Cost efficient

...keeping operating costs and rates down, despite soaring input costs.



Most of the "low-hanging fruit" in terms of productivity has been captured, however, and significant investment will be needed to generate further productivity improvements (e.g., technology investments to move from two-man to one-man crews).

Source: AAR, Oliver Wyman analysis.

Attractive to private investment

Thanks to continuous improvement in financial performance since1980, the railroads have attracted the capital necessary to expand and improve services to shippers.

Top 25 Investors in Major U.S. Railroads

Institutional Investor	BNI	UNP	CNI	CSX	NSC	CP	GWR	KSU	Grand Total
Barclays Global Investors	$980M	$923M	$522M	$569M	$876M	$298M	$31M	$96M	$4.3B
Berkshire Hathaway, Inc	$2.8B	$1.1B			$322M				$4.2B
Marsico Capital Management, LLC	$2.3B	$1.5B					$78M		$3.9B
Dodge & Cox Inc		$2.8B				$150M			$3.B
UBS Global Asset Management	$2.5B			$529M					$3.B
The Vanguard Group, Inc.	$777M	$743M		$497M	$539M		$23M	$74M	$2.7B
State Street Corporation	$775M	$672M		$537M	$611M				$2.6B
FMR Corporation	$1.6B		$647M						$2.2B
Capital Research and Management Company	$473M	$1.2B			$557M				$2.2B
Cascade Investment, L.L.C.			$1954M						$2.B
Atticus Capital LP		$628M		$503M	$515M				$1.6B
Deutsche Bank Aasset Management				$789M	$387M				$1.2B
Jarislowsky Fraser, Ltd.			$953M						$1.B
The TCW Group, Inc.				$896M					$896M
JP Morgan Chase & Company					$809M				$809M
NWQ Investment Management Company, LLC		$799M							$799M
Goldman Sachs Group Inc				$763M					$763M
Merrill Lynch & Co., Inc.				$753M					$753M
McLean Budden Ltd.			$719M						$719M
The Children's Investment Fund				$713M					$713M
I.G. Investment Management, Ltd.			$702M						$702M
RBC Asset Management, Inc.			$695M						$695M
Mackenzie Financial Corporation			$677M						$677M
Wellington Management Company, Llp			$523M				$136M		$658M
T. Rowe Price Associates		$549M					$80M		$628M
Top 25 Institutional Investors	**$12.2B**	**$10.9B**	**$7.4B**	**$6.5B**	**$4.6B**	**$448M**	**$348M**	**$170M**	**$42.6B**

Source: Amounts shown are as of March 31, 2007, as reported by Yahoo Finance.

Sufficient competitive mechanisms

CP's investment in the DM&E, potentially adding a third player to the Powder River Basin, shows that the private sector has the financial wherewithal and ability to increase competition, where railroads are able to justify the investment.[1]

- **February 26, 2007** (Washington, DC): Federal Railroad Administrator Joseph H. Boardman today denied a $2.3 billion Railroad Rehabilitation and Improvement Financing (RRIF) loan application from the Dakota, Minnesota, & Eastern (DM&E) railroad, concluding it posed an unacceptably high risk to federal taxpayers.

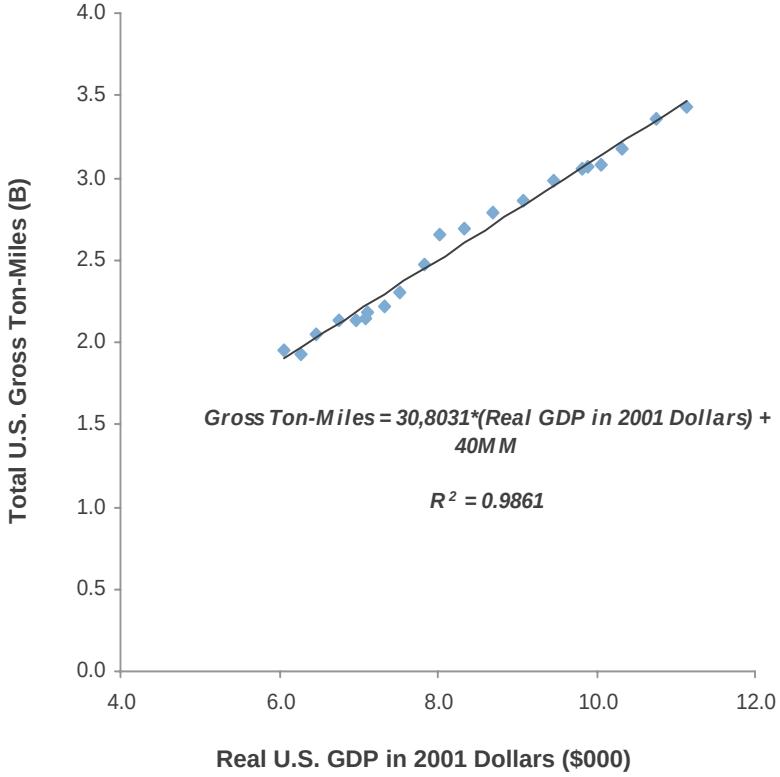
- **September 6,2007:** "CP Rail sees future in coal with U.S. railway takeover; agrees to pay $1.48 billion U.S. for DM&E Railroad in a deal that could offer access to low-sulphur coal." The Toronto Star. Canadian Pacific Railway Ltd., which barely a month ago was in the crosshairs of a potential buyer, has emerged as a hunter with a $1.48 billion (U.S.) acquisition of the Dakota, Minnesota & Eastern Railroad Corp.

[1]Note: CP has not committed to build-out into the PRB, but may do it if ROI dictates. The CP Board will ultimately decide and has sole discretion.

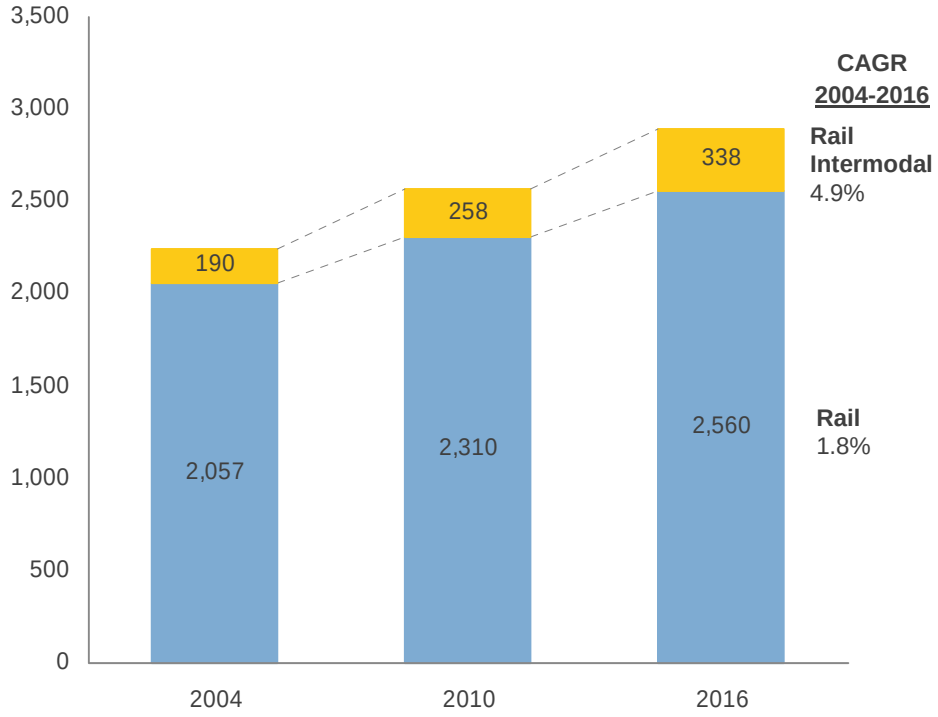
Need to meet traffic growth

The U.S. freight rail network will face unprecedented growth in coming years, however. Capacity expansion will have to be funded either privately or by government – or capacity will have to be rationed.

Gross Ton-Mileage as a Function of Real GDP
Data points from 1985-2005



Forecast Rail Freight Tonnage Growth
Millions of tons, 2004-2016

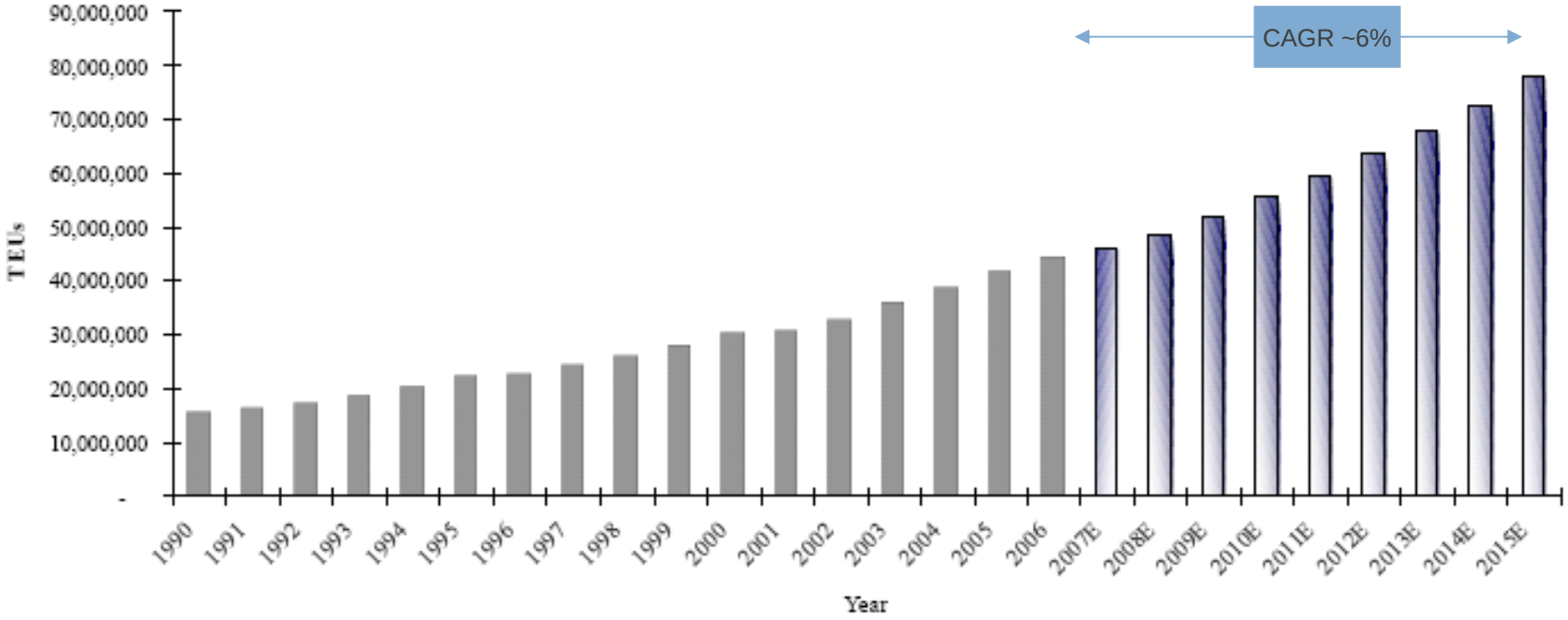


Source: U.S. Freight Transportation Forecasts to 2016; American Trucking Association, 2005; Budget and Economic Outlook, Congressional Budget Office, 2006, Oliver Wyman analysis.

Need to meet traffic growth: Intermodal

Intermodal growth (mainly container imports) is a key component of projected freight traffic. Total U.S. container traffic is projected to grow at ~6 percent annually over the near term – faster than GDP – requiring investment in infrastructure serving ports and key markets.

Total U.S. Container Traffic, Historical and Forecast, 1990-2015E

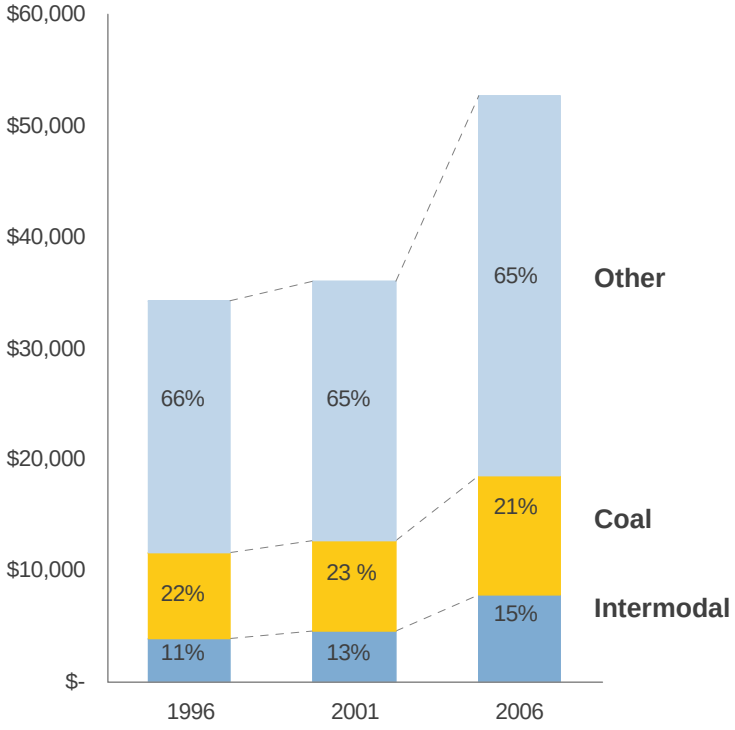


Source: American Association of Port Authorities, TTX, and Stifel Nicolaus.

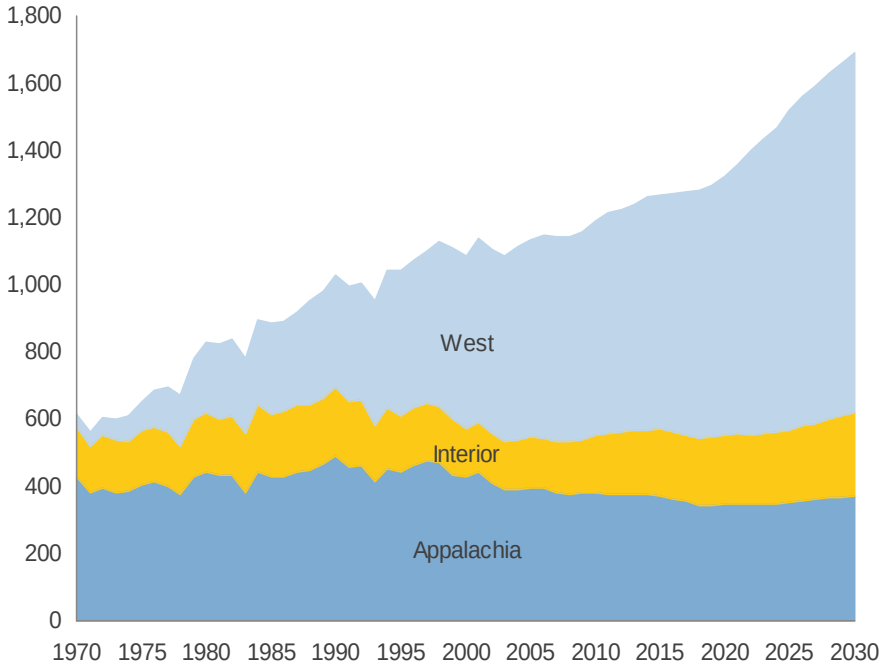
Need to meet traffic growth: Coal

Coal accounted for 21 percent of Class I revenue in 2006. Coal production is projected to increase by over 45 percent from 2006 to 2030 and will require infrastructure investment not only in the PRB but at major junctions and servicing points.

Class I Revenue by Commodity
$ millions, % share of revenue



U.S. Coal Production by Region, 1970-2030
Millions of short tons



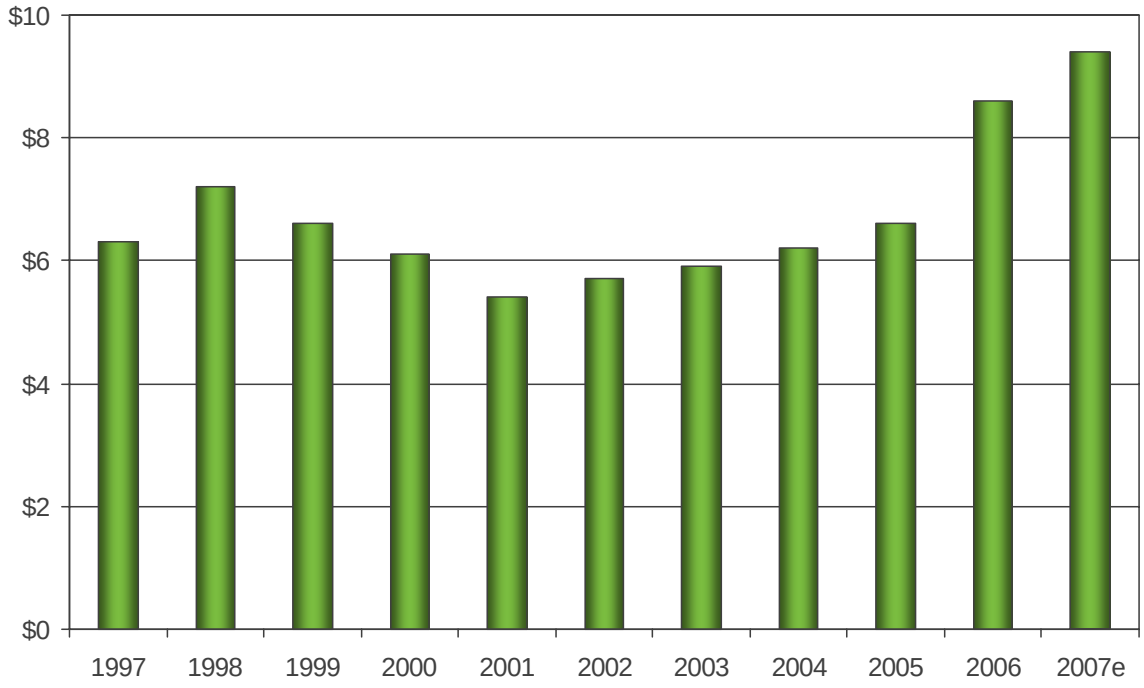
Source: Lefthand chart: 2006 Freight Commodity Statistics. Note: Intermodal is solely miscellaneous mixed shipments, additional intermodal traffic is included in other commodity groups. Righthand chart: Energy Information Administration Annual Energy Outlook 2007 with Projections to 2030.

Increasing capital investment

To deal with this growth, railroads are utilizing their improved earnings to expand reinvestment in the system – annual capital investment increased by 49 percent over the past decade.

U.S. Railroad Investment, 1997-2007E

$ billions

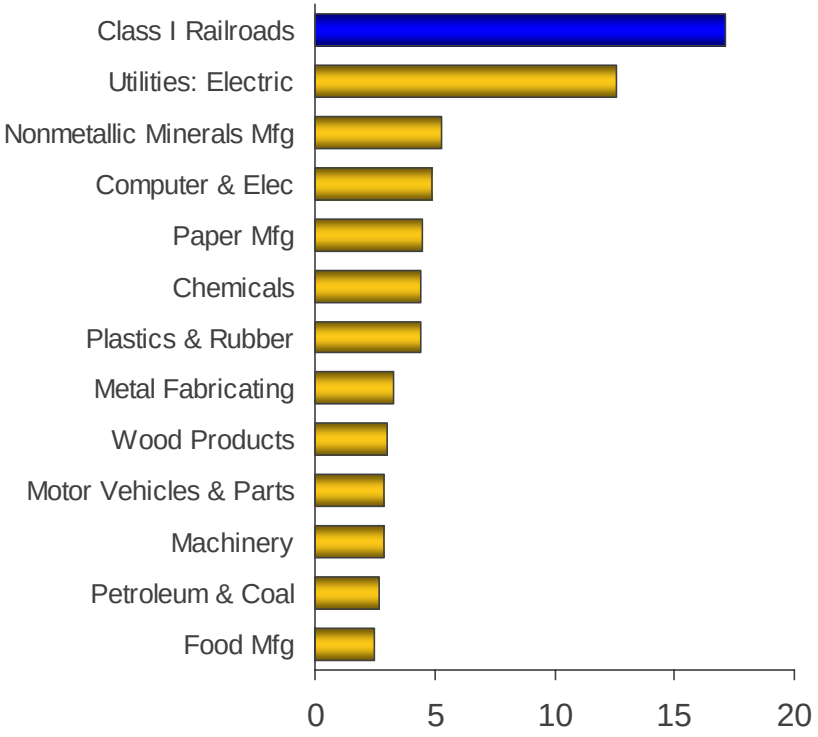


Source: AAR, Oliver Wyman analysis.

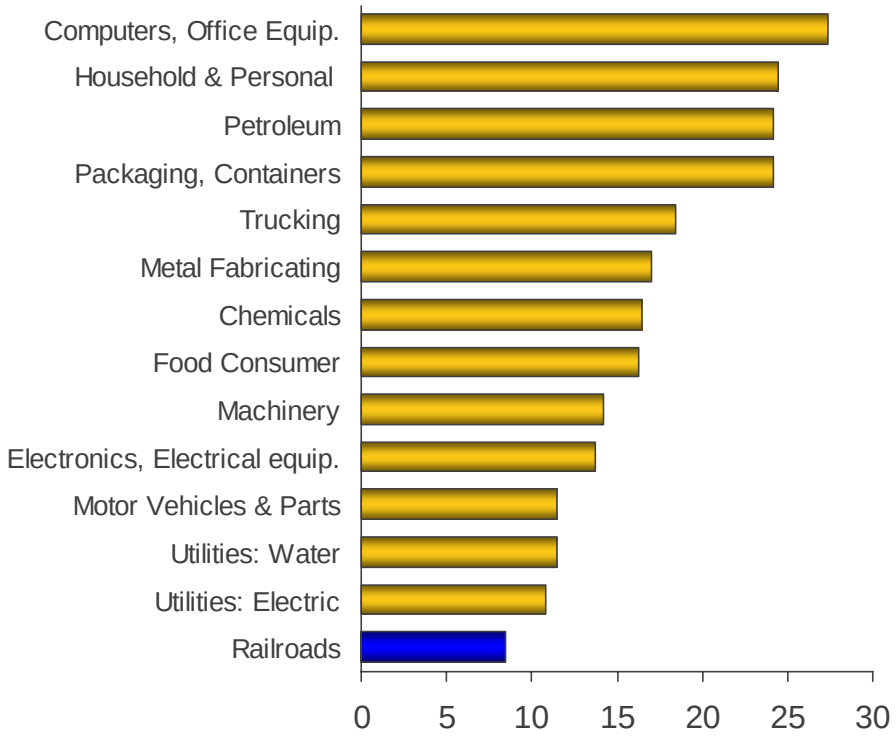
Capital intensive, but low returns

Railroads are arguably one of the most capital intensive industries in the United States, but have among the lowest return on equity.

Capital Expenditures as Percent of Revenue for Various Industries
Average 1996-2005



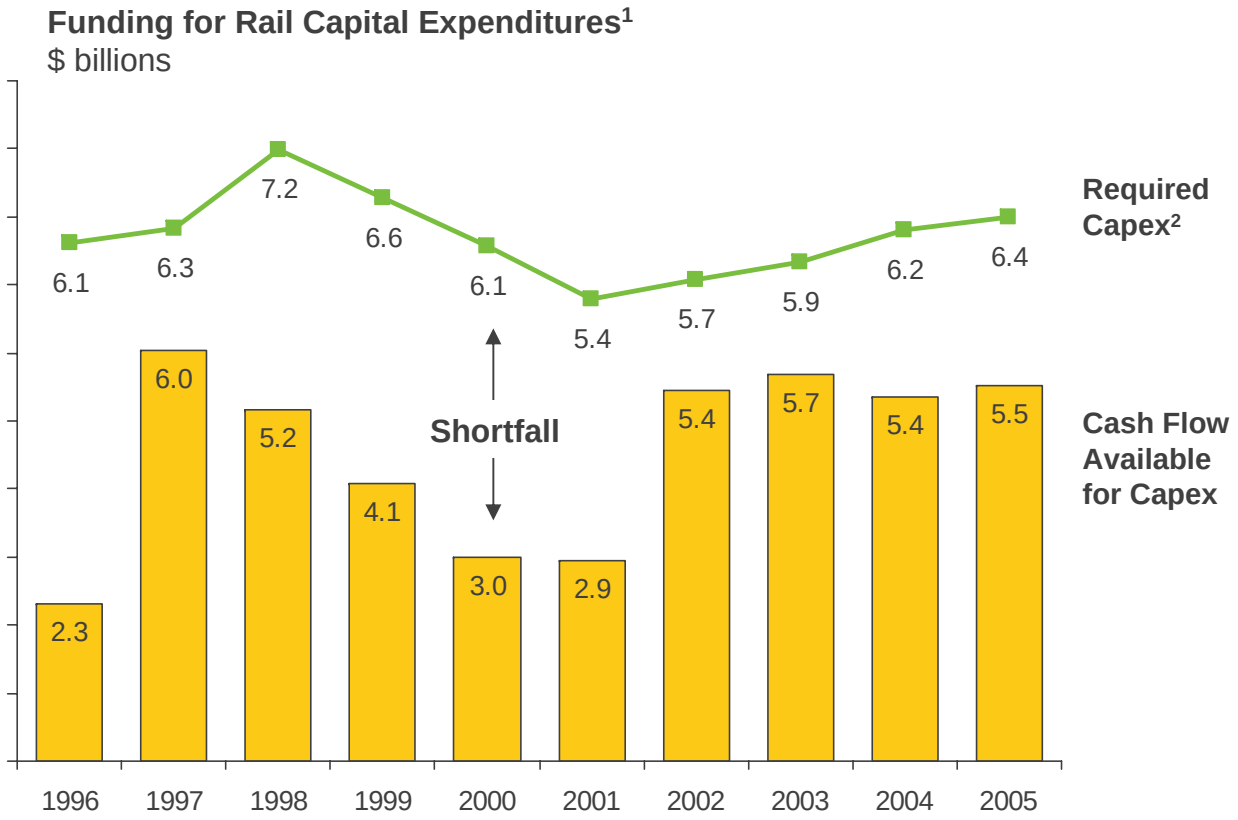
Return on Equity (%) for Various Industries, 2005



Source: Lefthand chart: U.S. Census Bureau. Righthand chart: Value Line 2005. Industries are not exact matches across charts due to different data sources.

Funding shortfall

As a result, railroads have not been able to fund all of their capital investment requirements from cash flow, and thus must rely on third-party investment.



1 Cash Flow = Net Income + Depreciation + Deferred Taxes +/- Subsidiary Adjustment – Dividends – Debt Repayment.
2 Equipment and roadway and structures only.
Source: AAR Ten Year Trends, Oliver Wyman analysis.

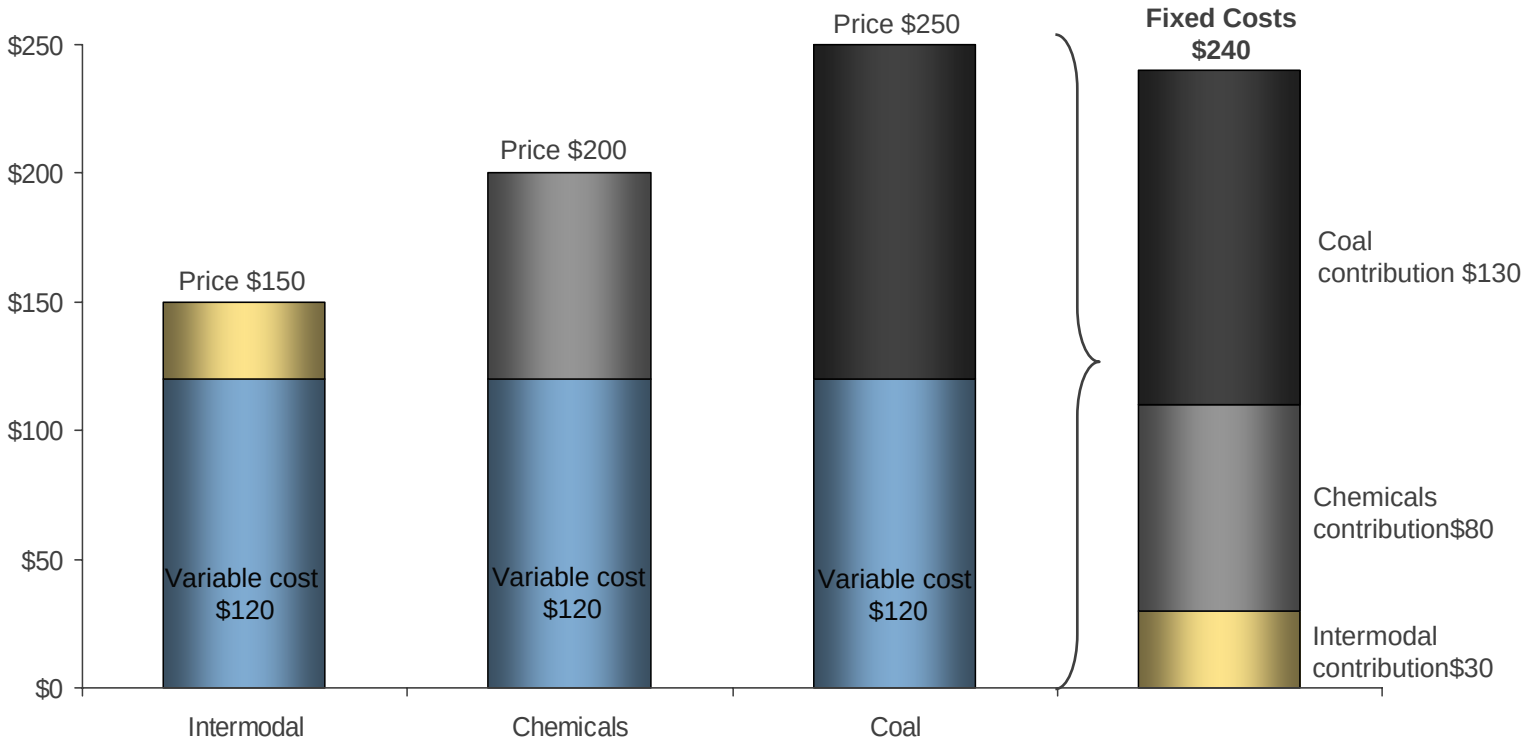
Differential pricing

Differential pricing is key to railroads' continuing ability to meet their fixed costs while generating the capital needed for reinvestment.

Currently, commodities are priced to reflect market demand and competition, and so contribute different amounts to fixed costs. Systemwide costs, however, are met.

Illustrative

Case A: Differential Pricing of Commodities

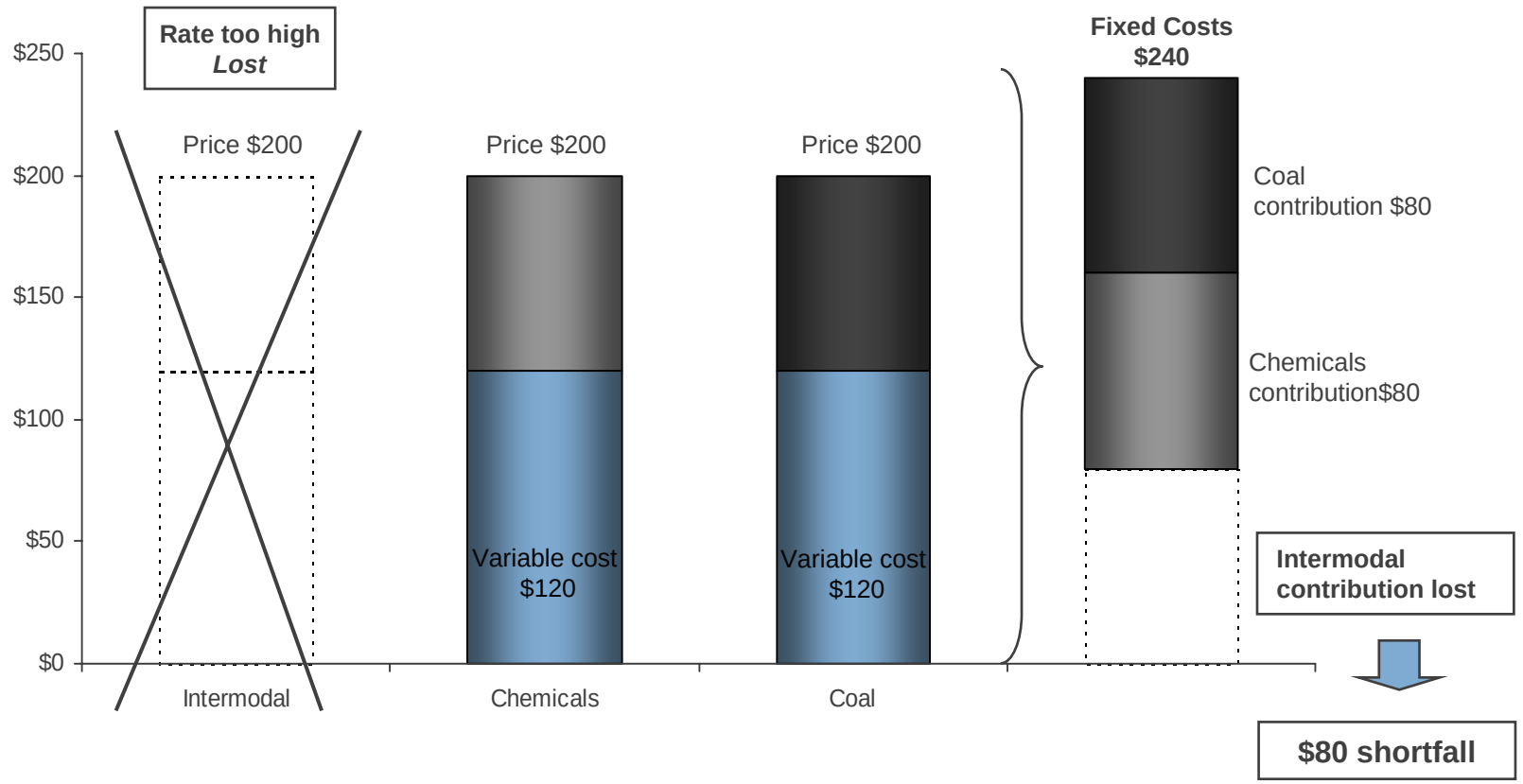


Differential pricing

If differential pricing were to be abandoned in favor of cost-based ratemaking, rates would become too high for some commodities, which would then be diverted to a competitive alternative.

Illustrative

Case B: Initial Impact of Cost-Based Ratemaking

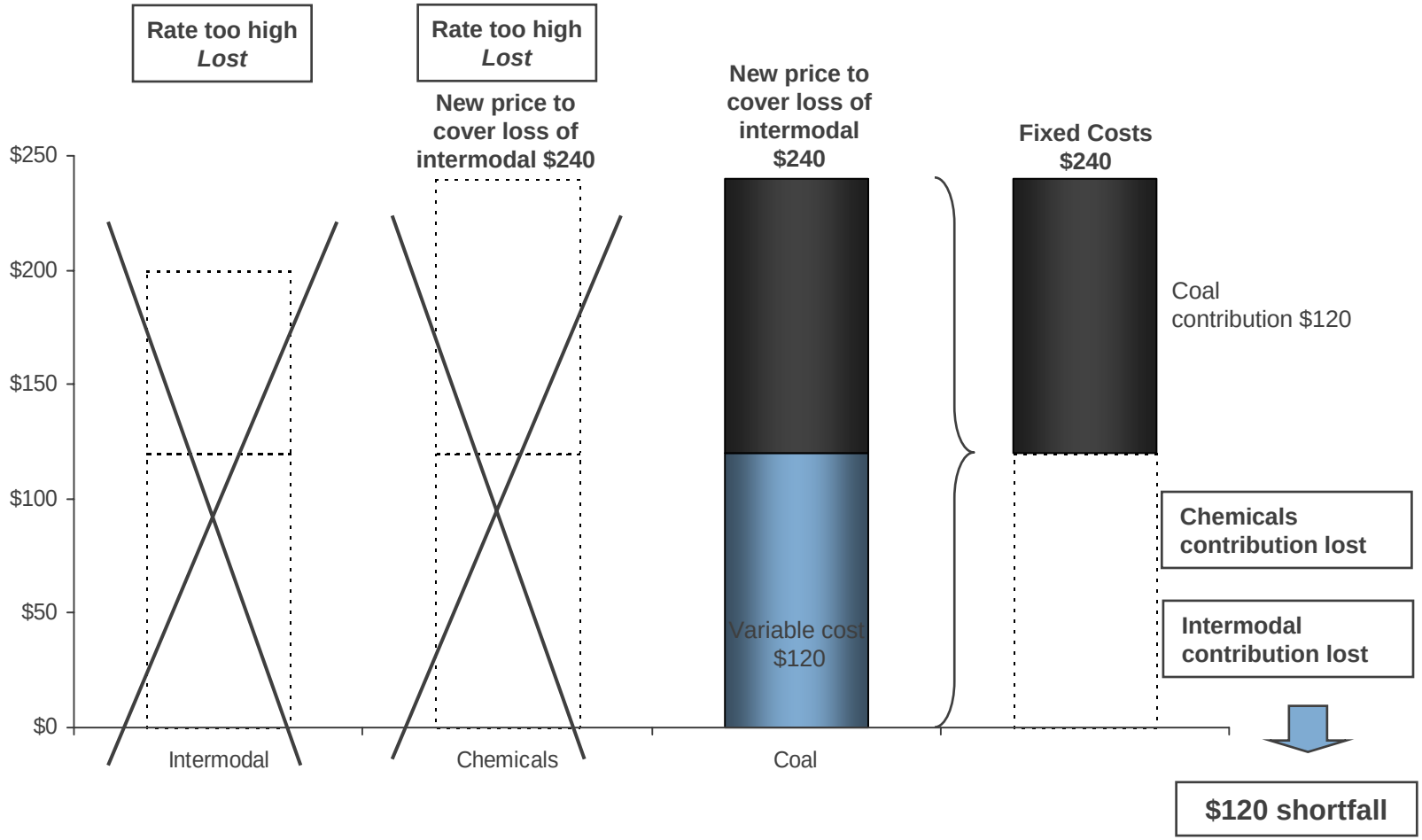


Differential pricing

A "domino effect" would then ensue, as the rate on remaining commodities would have to be raised to cover the revenue shortfall from the initial loss of traffic – resulting in even more traffic being diverted.

Illustrative

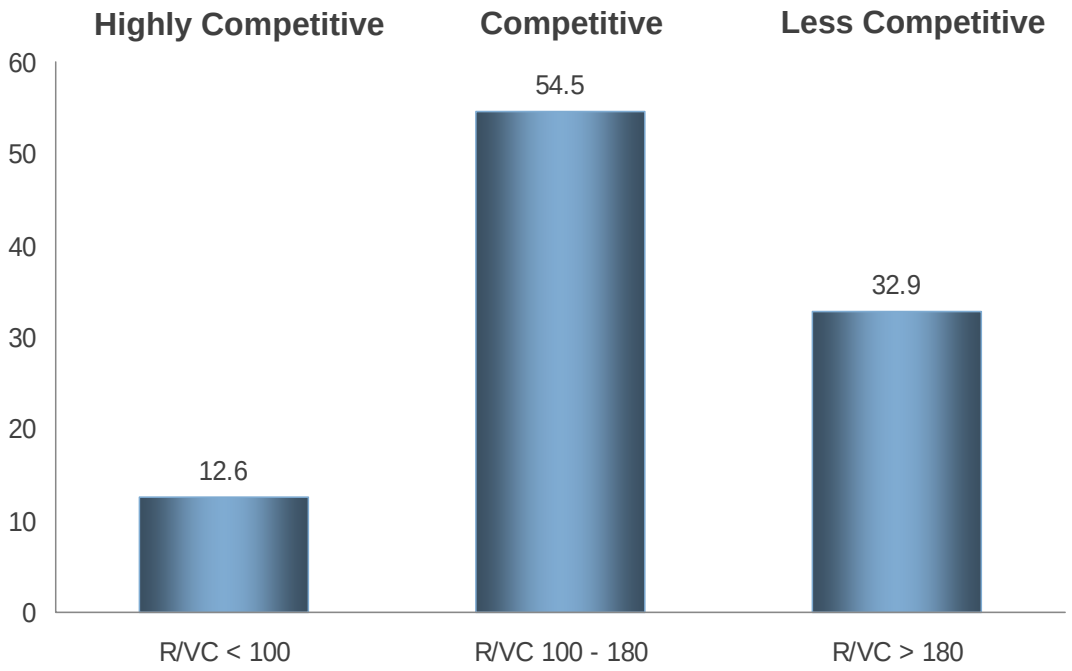
Case C: Secondary Impact of Cost-Based Ratemaking



Revenue to variable cost ratio

Contribution is defined by the revenue to variable cost (R/VC) ratio. Higher R/VC ratios for less competitive traffic enable R/VC ratios to be set lower for highly competitive traffic, while ensuring railroads' revenue adequacy.

Distribution of Shipment Revenues by Revenue-to-Variable Cost Ratio[1]
Percentage of total revenues in 2003

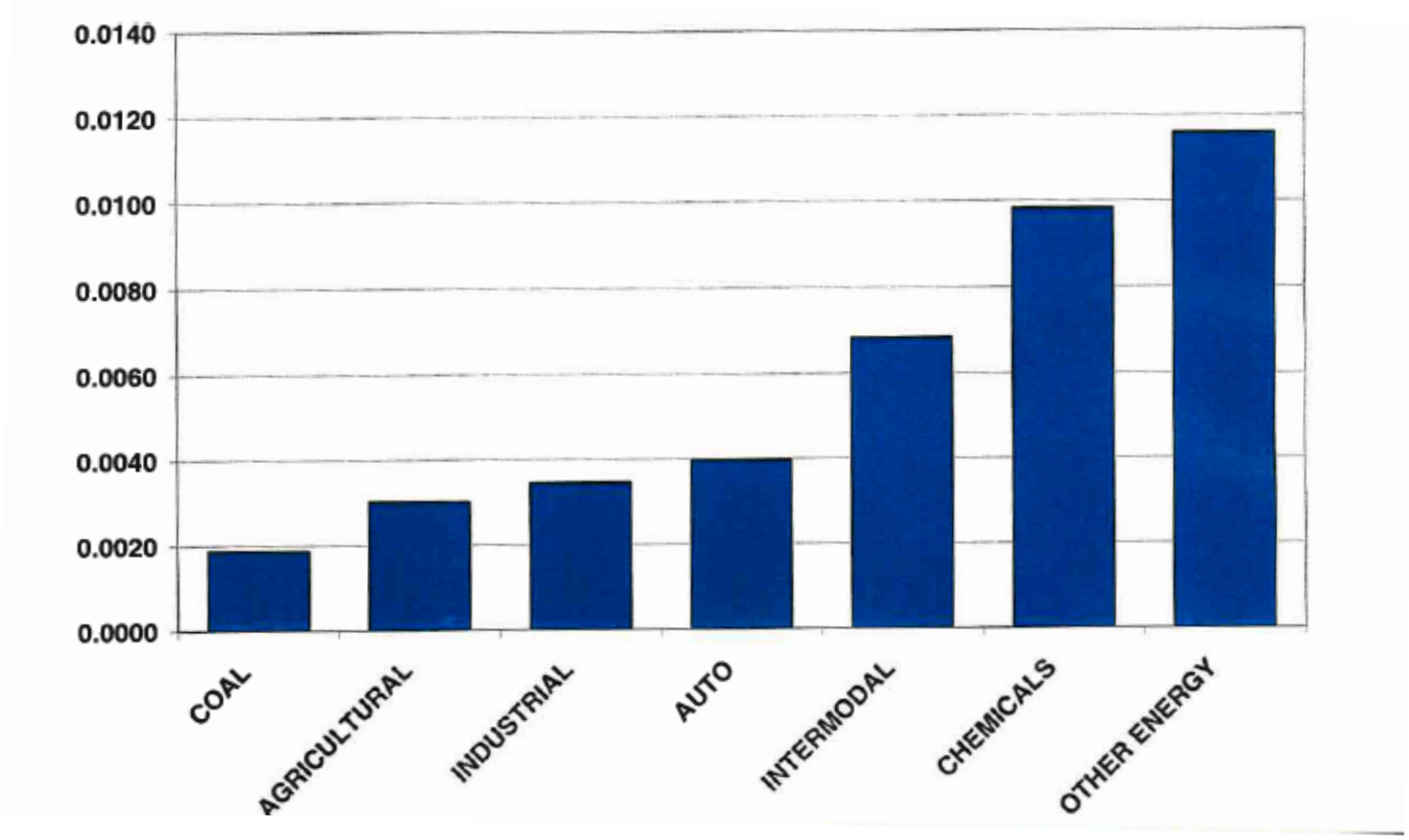


[1]Total U.S. Summary of Revenues, Variable Costs (URCS Costs - Utilizing Current Cost of Capital) R/VC and the Distribution of Revenues According to each Shipments' Revenue to Variable Cost Ratio for Selected Commodity Groups - Based Upon Waybill Data – 2003, Surface Transportation Board.

Contribution

Under differential pricing, various commodities will produce different contributions, based on the unique characteristics and competitive position of each industry.

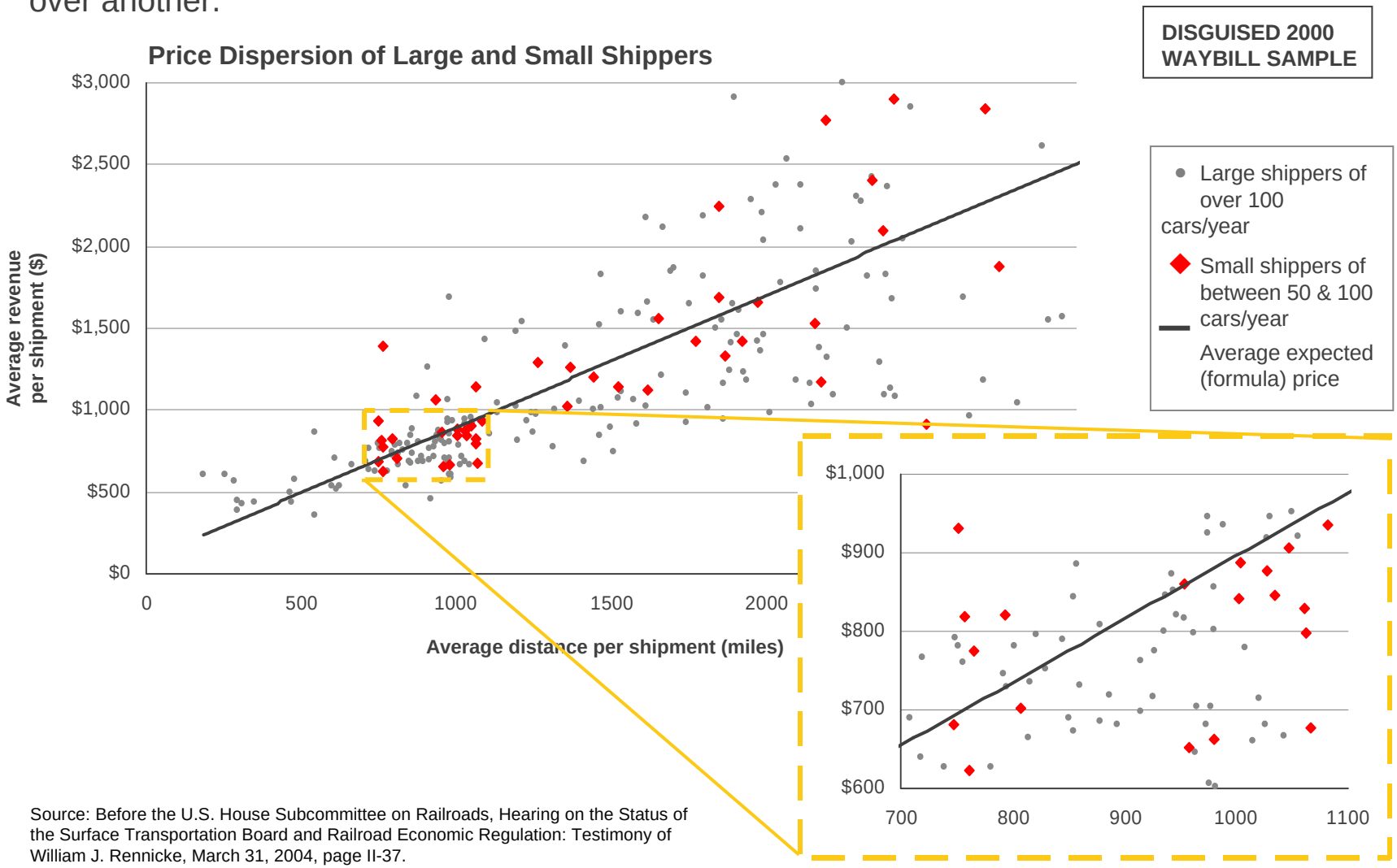
Union Pacific Contribution per Revenue Ton-Mile, 2004



Source: STB Ex Parte No. 657 (Sub No. 1), Opening Submission of the Union Pacific Railroad Company, May 1, 2006, Exhibit TCH-6.

Non-discrimination of pricing

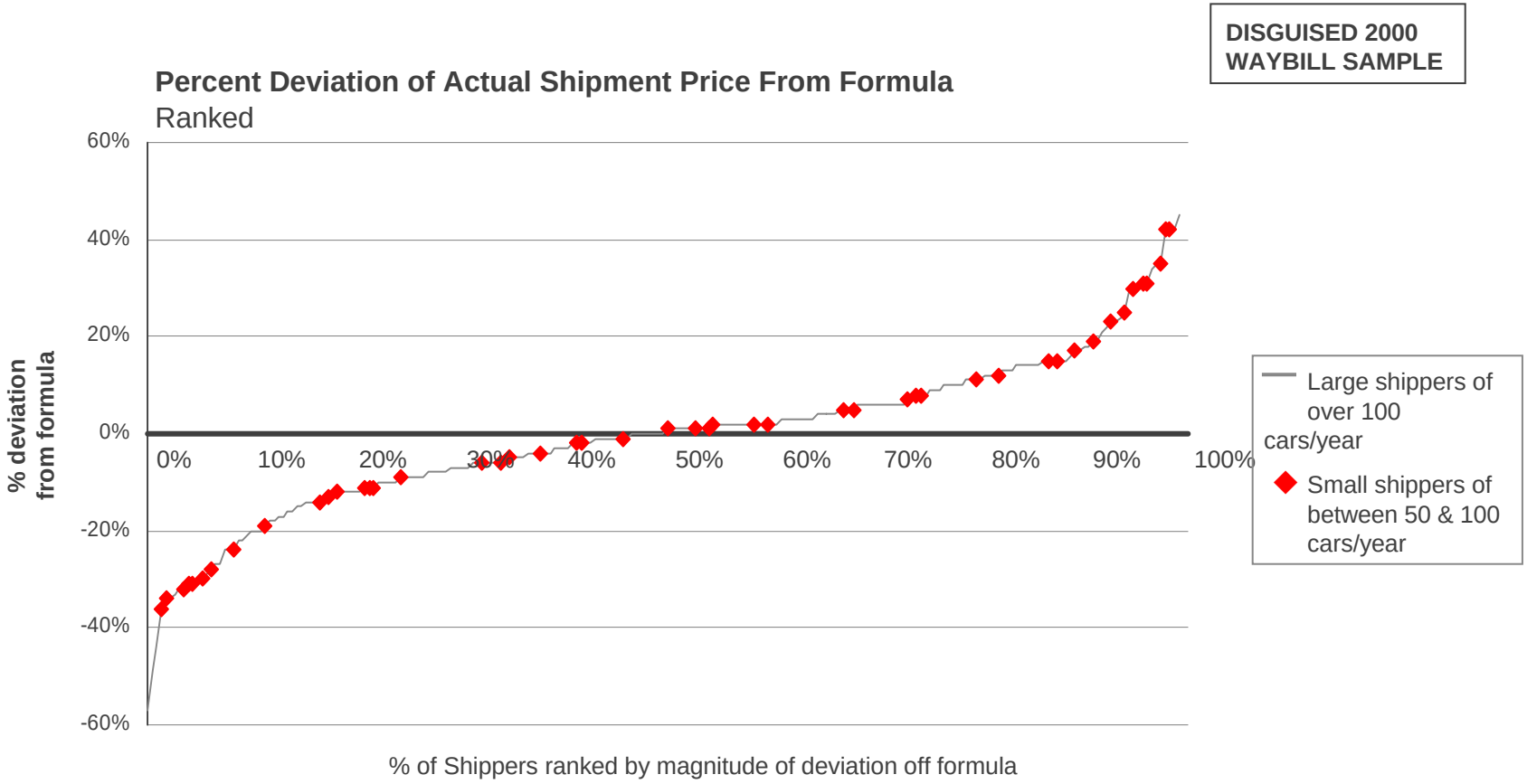
Under differential pricing practices, whether as a result of competition or the lack of it, rates charged to both large and small shippers for the same commodity group indicate that there does not seem to be a pattern of preferential or discriminatory pricing that favors one group over another.



Source: Before the U.S. House Subcommittee on Railroads, Hearing on the Status of the Surface Transportation Board and Railroad Economic Regulation: Testimony of William J. Rennicke, March 31, 2004, page II-37.

Non-discrimination of pricing

Comparison of actual freight rates with expected (formula) prices indicates that there is no pattern of preferential pricing for any one group. Any shipper, large or small, is just as likely to receive discounts or pay a premium price.



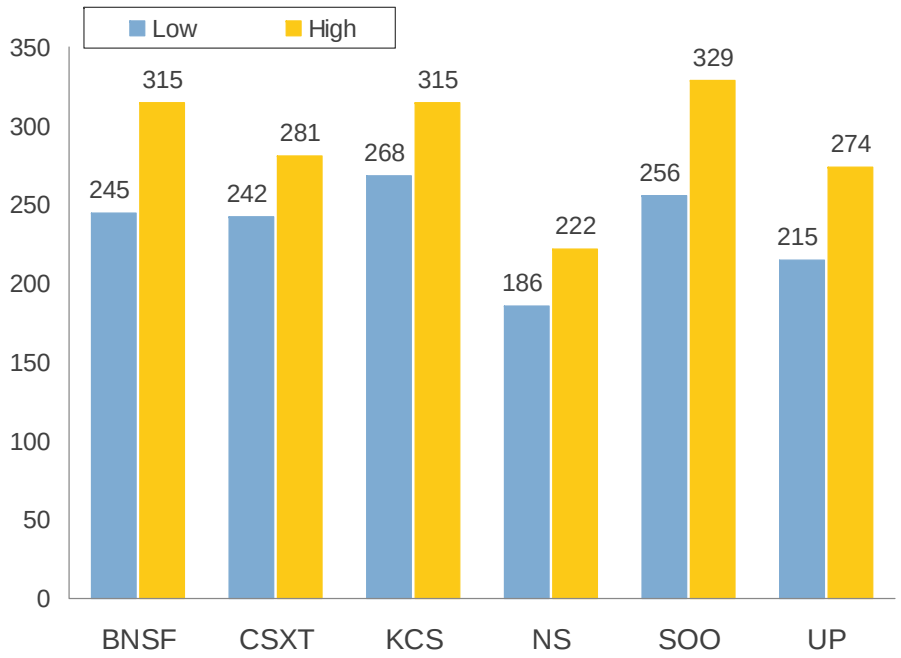
Source: Before the U.S. House Subcommittee on Railroads, Hearing on the Status of the Surface Transportation Board and Railroad Economic Regulation: Testimony of William J. Rennicke, March 31, 2004, page II-38.

Required markups

The size of markups above variable cost required on potentially captive traffic (R/VC>180) indicates that the carriers are experiencing major revenue shortfalls for traffic at or below 180.

Range of RSAM Mark-Up Percentages (2001-2004), With and Without Efficiency Adjustment

Percentage of Variable Costs



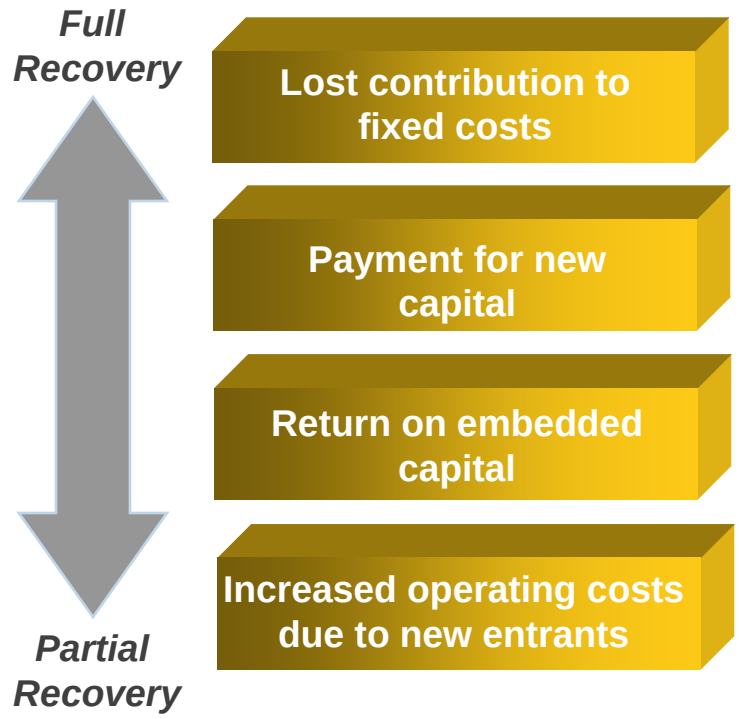
- The revenue shortfall allocation method (RSAM) is used by the STB to determine the average markup above variable cost that a carrier would need to charge potentially captive traffic (R/VC>180) to recover all of its un-attributed costs and become revenue adequate.
- RSAM demonstrates that, given the size of the markups required, there must be a substantial revenue shortfall on traffic that is at or below 180 for the major carriers.
- The HR 2125 legislation will have the effect of cutting off charges above 180, or all of the revenue covered in the RSAM consideration.

Source: STB Ex Parte No 347 (Sub-No. 2) Decided April 24, 2006.

Impact on the railroads of a rate cap

A rate cap of 180 R/VC would result in significant lost contribution, reducing the ability of railroads to recover their fixed and variable costs and to fund capital investments.

Layers of Cost and Value Recovery for Railroads



Failure to make the railroads whole for these layers could result in:

- Effective subsidization of shippers and competitors
- The need for additional government funding to maintain the rail network (or increase funding for highways as rail loses traffic to trucking)
- Reduced competitiveness for some economic sectors (rail forced to drop traffic due to rate caps, fewer transport choices for shippers)

Appendix: 2003 R/VC ratios

Total U.S. summary of revenues, variable costs (URCS costs - utilizing current cost of capital), avg. R/VC and the distribution of revenues according to each shipments' R/VC ratio for selected commodity groups – based upon Waybill data – 2003

Commodity Group	Revenue (000s)	Percent of Total	Variable Cost (000s)	Average R/VC Ratio	Percent of Commodity Revenue in Each R/VC Cell: R/VC < 100	R/VC 100-180	R/VC > 180
Farm products	2,903,486	7.32	1,947,197	149.11	8.68	56.96	34.35
Forest products	6,002	0.02	4,849	123.77	14.43	56.87	28.70
Fresh fish or other marine prod	5,725	0.01	4,546	125.93	5.12	78.91	15.97
Metallic ores	414,654	1.05	286,293	144.84	12.85	45.18	41.97
Coal	7,978,478	20.13	5,049,330	158.01	5.32	54.77	39.91
Crude petroleum nat. gas gasoline	16,624	0.04	9,702	171.34	0.00	58.69	41.31
Non metallic minerals	1,115,617	2.81	806,075	138.40	14.36	56.46	29.18
Ordinance or accessories	14,054	0.04	5,018	280.03	2.59	20.71	76.70
Food and kindred products	2,782,707	7.02	2,214,922	125.63	18.28	61.83	19.89
Tobacco products	757	0.00	914	82.82	87.30	9.29	3.40
Textile mill products	12,485	0.03	10,235	121.98	16.48	72.22	11.30
Apparel - finished textile prod.	113,307	0.29	78,919	143.57	7.40	60.32	32.28
Lumber and wood (except furniture)	1,791,389	4.52	1,517,133	118.08	21.06	65.76	13.18
Furniture and fixtures	56,030	0.14	36,715	152.61	8.27	49.14	42.59
Pulp, paper and allied products	1,811,304	4.57	1,516,435	119.44	20.64	64.84	14.52
Printed matter	26,958	0.07	16,825	160.22	6.96	42.14	50.90
Chemicals	5,027,209	12.68	2,793,333	179.97	5.58	35.44	58.98
Petroleum or coal products	1,182,199	2.98	712,081	166.02	7.45	42.12	50.44
Rubber and misc plastics	104,305	0.26	74,561	139.89	10.59	57.82	31.59
Leather or leather products	3,475	0.01	2,206	157.53	5.53	58.06	36.41
Stone, clay and glass products	1,306,355	3.30	864,388	151.13	7.72	53.72	38.56
Primary metal products	1,410,165	3.56	1,094,542	128.84	16.19	67.79	16.03
Fabricated metal products	47,376	0.12	29,380	161.25	10.58	45.11	44.32
Machinery except electrical	65,100	0.16	35,909	181.29	6.64	41.45	51.92
Electrical machinery or equipment	185,326	0.47	129,325	143.30	19.66	39.49	40.86
Transportation equipment	3,870,917	9.77	3,057,946	126.59	17.62	64.72	17.67
Instruments or photographic goods	4,913	0.01	2,605	188.59	4.55	27.87	67.58
Misc. Products of manufacturing	50,427	0.13	32,046	157.36	10.39	41.29	48.32
Waste or scrap materials	801,482	2.02	678,762	118.08	23.01	52.83	24.16
Misc. freight shipments	248,009	0.63	135,156	183.50	3.21	47.14	49.65
Containers returned empty	520,093	1.31	606,879	85.70	55.41	34.60	9.99
Freight forwarder traffic	229,483	0.58	134,818	170.22	7.02	33.29	59.69
Shipper association traffic	14,587	0.04	11,358	128.43	18.10	51.56	30.34
Misc. mixed shipments ex. forward	5,241,462	13.22	3,975,461	131.85	16.75	57.79	25.46
Less than carload traffic	134,460	0.34	64,324	209.03	0.98	17.10	81.93
All other categories	142,667	0.36	89,243	159.86	6.04	43.71	50.25
Total All Commodities	39,639,603	100.00	28,029,448	141.42	12.61	54.54	32.86

Source: Surface Transportation Board.

Appendix: 1993 R/VC ratios

Total U.S. summary of revenues, variable costs (URCS costs - utilizing current cost of capital), avg. R/VC and the distribution of revenues according to each shipments' R/VC ratio for selected commodity groups – based upon Waybill data – 1993

Commodity Group	Revenue (000s)	Percent of Total	Variable Cost (000s)	Average R/VC Ratio	Percent of Commodity Revenue in Each R/VC Cell: R/VC < 100	R/VC >100-<140	R/VC >140-<180	R/VC > 180
Farm products	2530181	8.47	1957253	129.27	19.49	34.28	20.41	25.81
Forest products	15687	0.05	16073	97.59	36.44	34.79	17.36	11.42
Fresh fish or other marine prod	2301	0.01	4831	47.63	75.30	24.70	0.00	0.00
Metallic ores	497378	1.67	312170	159.33	8.16	19.47	23.78	48.58
Coal	6325595	21.18	3628287	174.34	2.26	18.98	25.01	53.75
Crude petroleum nat. gas gasoline	33176	0.11	26989	122.92	14.74	28.69	50.22	6.35
Non metallic minerals	873511	2.93	695007	125.68	20.56	33.90	24.27	21.27
Ordinance or accessories	22172	0.07	12785	173.42	5.83	17.57	19.26	57.34
Food and kindred products	2315909	7.76	2152216	107.61	33.90	37.83	15.92	12.34
Tobacco products	2724	0.01	3517	77.45	78.24	15.71	6.05	0.00
Textile mill products	9980	0.03	10104	98.77	48.80	34.54	7.63	9.03
Apparel - finished textile prod.	13872	0.05	13921	99.65	39.17	33.06	16.89	10.89
Lumber and wood (except furniture)	1185617	3.97	1114351	106.40	32.84	40.63	18.51	8.02
Furniture and fixtures	53535	0.18	57721	92.75	47.57	36.92	9.60	5.91
Pulp, paper and allied products	1481286	4.96	1219967	121.42	18.75	43.02	26.41	11.82
Printed matter	32844	0.11	34457	95.32	44.76	34.91	9.71	10.63
Chemicals	3951461	13.23	2532426	156.03	10.65	18.91	22.97	47.46
Petroleum or coal products	907802	3.04	658366	137.89	14.97	30.38	24.10	30.54
Rubber and misc plastics	102913	0.34	115735	88.92	52.01	32.72	9.92	5.35
Leather or leather products	6488	0.02	8954	72.46	88.84	7.87	1.72	1.56
Stone, clay and glass products	993897	3.33	718996	138.23	10.74	34.17	28.95	26.15
Primary metal products	986059	3.30	798218	123.53	21.50	34.25	23.10	21.16
Fabricated metal products	51640	0.17	47612	108.46	41.62	23.73	7.60	27.05
Machinery except electrical	62933	0.21	50476	124.68	23.31	29.94	19.80	26.95
Electrical machinery or equipment	151897	0.51	151539	100.24	47.75	33.37	6.76	12.13
Transportation equipment	2980205	9.98	1851547	160.96	9.13	15.98	22.33	52.56
Instruments or photographic goods	2597	0.01	2956	87.85	57.58	31.97	8.03	2.42
Misc. Products of manufacturing	36071	0.12	42679	84.52	63.26	26.48	4.96	5.31
Waste or scrap materials	602569	2.02	531555	113.36	26.71	36.35	22.99	13.95
Misc. freight shipments	134372	0.45	88973	151.03	9.41	20.83	26.66	43.10
Containers returned empty	192617	0.65	378861	50.84	83.68	10.84	1.89	3.58
Freight forwarder traffic	55862	0.19	53398	104.61	33.25	35.73	15.67	15.35
Shipper association traffic	43732	0.15	49121	89.03	53.06	29.05	13.37	4.52
Misc. mixed shipments ex. forward	3062802	10.26	3785232	80.91	59.45	29.70	8.41	2.45
Less than carload traffic	34259	0.11	29847	114.78	26.16	31.55	21.46	20.83
All other categories	106189	0.36	76463	138.88	7.15	44.19	26.48	22.18
Total All Commodities	29862136	100.00	23232603	128.54	19.85	27.08	21.02	32.05

Source: Interstate Commerce Commission.

OLIVER WYMAN

MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN